

TRANSLATION OF FIRST AMENDMENT (NOV.02.1999) UNDER ARTICLE 34 OF PCT

- We added after "direction" on page 2, line 37 "by causing the substrate to rotate".
- We also amended claims 1 and 10.
- Amended pages 2 and 2/1, and Amended claims are attached.

wafer to a predetermined direction. After conducted the alignment process, the semiconductor wafer is conveyed from the alignment mechanism to the load-lock chamber via the conveying mechanism. Then, the semiconductor wafer is conveyed from the load-lock chamber to a predetermined corresponding processing chamber via the conveying mechanism arranged in the conveying chamber under a reduced pressure. The semiconductor wafer undergoes a predetermined process in the processing chamber. The processed semiconductor wafer is contained in a carrier, which is adapted to contain processed semiconductor wafers, via the conveying chamber, the load-lock chamber and the alignment chamber.

SUMMARY OF THE INVENTION

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However, generally, a speed of the alignment process may be a condition for determining a speed of entire sequential processes for the semiconductor wafer (if a time for which the alignment process is conducted is longer than a time for which the semiconductor wafer is processed). Whichever it may or not, in order to raise a throughput, it is an important point to shorten a waiting time (an idle time) of the alignment process. However, as described above, in the case that after the alignment process for a previous semiconductor wafer has been completed, a next semiconductor wafer is conveyed from the carrier chamber to the alignment mechanism, a time for which the next semiconductor wafer is conveyed from the carrier chamber to the alignment mechanism is an idle time of the alignment mechanism. Thus, there is a problem that the throughput is relatively low.

This invention is intended to solve the above problem effectively. The object of this invention is to provide an alignment processing mechanism, which can be used with greater efficiency in order to achieve such a high speed of an alignment process that a throughput may be raised.

In order to achieve the object, an alignment processing nechanism according to the invention is characterized by comprising: a conveying mechanism for conveying a substrate to be processed, an alignment mechanism for aligning the substrate conveyed by the conveying mechanism to a predetermined direction,